RAW SEQUENCE LISTING

EFS

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/553,906D
Source: IFW0
Date Processed by STIC: 1/5/07

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IFWO

RAW SEQUENCE LISTING DATE: 01/05/2007
PATENT APPLICATION: **US/10/553,906D** TIME: 14:14:14

Input Set : **N:\efs\01_05_07\10553906_efs\ALBI-41348-sequence_ST25.txt**
Output Set: **N:\CRF4\01052007\J553906D.raw**

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3 <110> APPLICANT: Bergman, Tomas
4       Duan, Rui-Dong
5       Nilsson, Ake
7 <120> TITLE OF INVENTION: Human Alkaline Sphingomyelinase and Use Thereof
9 <130> FILE REFERENCE: ALBI 41348
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/553,906D
C--> 12 <141> CURRENT FILING DATE: 2005-10-21
14 <150> PRIOR APPLICATION NUMBER: US 60/320,139
15 <151> PRIOR FILING DATE: 2003-04-24
17 <150> PRIOR APPLICATION NUMBER: US 60/481,598
18 <151> PRIOR FILING DATE: 2003-11-05
20 <160> NUMBER OF SEQ ID NOS: 18
22 <170> SOFTWARE: PatentIn version 3.4
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 458
26 <212> TYPE: PRT
27 <213> ORGANISM: Homo sapiens
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39 Leu Leu Leu Val Ser Phe Asp Gly Phe Arg Trp Asn Tyr Asp Gln Asp
40         35                  40                  45
43 Val Asp Thr Pro Asn Leu Asp Ala Met Ala Arg Asp Gly Val Lys Ala
44     50                  55                  60
47 Arg Tyr Met Thr Pro Ala Phe Val Thr Met Thr Ser Pro Cys His Phe
48 65                  70                  75                  80
51 Thr Leu Val Thr Gly Lys Tyr Ile Glu Asn His Gly Val Val His Asn
52                 85                  90                  95
55 Met Tyr Tyr Asn Thr Thr Ser Lys Val Lys Leu Pro Tyr His Ala Thr
56             100                 105                 110
59 Leu Gly Ile Gln Arg Trp Trp Asp Asn Gly Ser Val Pro Ile Trp Ile
60         115                 120                 125
63 Thr Ala Gln Arg Gln Gly Leu Arg Ala Gly Ser Phe Phe Tyr Pro Gly
64     130                 135                 140
67 Gly Asn Val Thr Tyr Gln Gly Val Ala Val Thr Arg Ser Arg Lys Glu
68 145                 150                 155                 160
71 Gly Ile Ala His Asn Tyr Lys Asn Glu Thr Glu Trp Arg Ala Asn Ile
72                 165                 170                 175
75 Asp Thr Val Met Ala Trp Phe Thr Glu Glu Asp Leu Asp Leu Val Thr
76             180                 185                 190
79 Leu Tyr Phe Gly Glu Pro Asp Ser Thr Gly His Arg Tyr Gly Pro Glu
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Output Set: N:\CRF4\01052007\J553906D.raw

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87 Tyr Leu Arg Glu Ser Ile Ala Arg Asn His Leu Thr Asp Arg Leu Asn
88 225                 230                 235                 240
91 Leu Ile Ile Thr Ser Asp His Gly Met Thr Thr Val Asp Lys Arg Ala
92                  245                 250                 255
95 Gly Asp Leu Val Glu Phe His Lys Phe Pro Asn Phe Thr Phe Arg Asp
96              260                 265                 270
99 Ile Glu Phe Glu Leu Leu Asp Tyr Gly Pro Asn Gly Met Leu Leu Pro
100         275                 280                 285
103 Lys Glu Gly Arg Leu Glu Lys Val Tyr Asp Ala Leu Lys Asp Ala His
104     290                 295                 300
107 Pro Lys Leu His Val Tyr Lys Lys Glu Ala Phe Pro Glu Ala Phe His
108 305                 310                 315                 320
111 Tyr Ala Asn Asn Pro Arg Val Thr Pro Leu Leu Met Tyr Ser Asp Leu
112                 325                 330                 335
115 Gly Tyr Val Ile His Gly Arg Ile Asn Val Gln Phe Asn Asn Gly Glu
116             340                 345                 350
119 His Gly Phe Asp Asn Lys Asp Met Asp Met Lys Thr Ile Phe Arg Ala
120         355                 360                 365
123 Val Gly Pro Ser Phe Arg Ala Gly Leu Glu Val Glu Pro Phe Glu Ser
124     370                 375                 380
127 Val His Val Tyr Glu Leu Met Cys Arg Leu Leu Gly Ile Val Pro Glu
128 385                 390                 395                 400
131 Ala Asn Asp Gly His Leu Ala Thr Leu Leu Pro Met Leu His Thr Glu
132                 405                 410                 415
135 Ser Ala Leu Pro Pro Asp Ala Leu Leu Val Ala Asp Gly Pro Cys Leu
136             420                 425                 430
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157 tcctggtgtc cttcgacggc ttccgctgga actacgacca ggacgtggac acccccaacc    180
159 tggacgccat ggcccgagac ggggtgaagg cacgctacat gacccccgcc tttgtcacca    240
161 tgaccagccc ctgccacttc accctggtca ccggcaaata tatcgagaac cacggggtgg    300
163 ttcacaacat gtactacaac accaccagca aggtgaagct gccctaccac gccacgctgg    360
165 gcatccagag gtggtgggac aacggcagcg tgcccatctg gatcacagcc cagaggcagg    420
167 gcctgagggc tggctccttc ttctacccgg gcgggaacgt cacctaccaa ggggtggctg    480
169 tgacgcggag ccggaaagaa ggcatcgcac acaactacaa aaatgagacg gagtggagag    540
171 cgaacatcga cacagtgatg gcgtggttca cagaggagga cctggatctg gtcacactct    600
173 acttcgggga gccggactcc acgggccaca ggtacggccc cgagtccccg gagaggaggg    660
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Output Set: **N:\CRF4\01052007\J553906D.raw**

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179 aacgggctgg cgacctggtt gaattccaca agttccccaa cttcaccttc cgggacatcg    840
181 agtttgagct cctggactac ggaccaaacg ggatgctgct ccctaaagaa gggaggctgg    900
183 agaaggtgta cgatgccctc aaggacgccc accccaagct ccacgtctac aagaaggagg    960
185 cgttccccga ggccttccac tacgccaaca accccagggt cacacccctg ctgatgtaca   1020
187 gcgaccttgg ctacgtcatc catgggagaa ttaacgtcca gttcaacaat ggggagcacg   1080
189 gctttgacaa caaggacatg gacatgaaga ccatcttccg cgctgtgggc cctagcttca   1140
191 gggcgggcct ggaggtggag ccctttgaga gcgtccacgt gtacgagctc atgtgccggc   1200
193 tgctgggcat cgtgcccgag gccaacgatg ggcacctagc tactctgctg cccatgctgc   1260
195 acacagaatc tgctcttccg cctgatgctc tgctggtcgc ggacggaccc tgcctcccca   1320
197 gcttatccca ggccagaggc tgcatgccac tgtccccggc agcgccaacc cctgcttggc   1380
199 tgttatggtg ctggtaataa gcctgcagcc caggtccaaa gcccccggcg agccggtccc   1440
201 ataaccggcc ccctgccccc gcccctgctc ctgctcctcc ccttcgggcc ccctcctcct   1500
203 gcaaaacccg ctcccgaagc ggcgctgccg tctgcagcca cgcgggggcg cgcgggagtc   1560
205 ttctgcgggc gctggaacct gcagacccgg cctcggtcag ctgggagggg cccgccccgg   1620
207 cacaaagcac ccatgggaat aaaggccaag ccgcgacagt cagcaaaaaa aaaaaaaaaa   1680
209 aaaaaaaaaa aaaaaaaaaa a                                            1701
212 <210> SEQ ID NO: 3
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214 <212> TYPE: PRT
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220 1               5                   10                  15
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229 <212> TYPE: PRT
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239             20                  25                  30
242 Leu Leu Leu Val Ser Phe Asp Gly Phe Arg Trp Asn Tyr Asp Gln Asp
243         35                  40                  45
246 Val Asp Thr Pro Asn Leu Asp Ala Met Ala Arg Asp Gly Val Lys Ala
247     50                  55                  60
250 Arg Tyr Met Thr Pro Ala Phe Val Thr Met Thr Ser Pro Cys His Phe
251 65                  70                  75                  80
254 Thr Leu Val Thr Gly Lys Tyr Ile Glu Asn His Gly Val Val His Asn
255                 85                  90                  95
258 Met Tyr Tyr Asn Thr Thr Ser Lys Val Lys Leu Pro Tyr His Ala Thr
259             100                 105                 110
262 Leu Gly Ile Gln Arg Trp Trp Asp Asn Gly Ser Val Pro Ile Trp Ile
263         115                 120                 125
266 Thr Ala Gln Arg Gln Gly Leu Arg Ala Gly Ser Phe Phe Tyr Pro Gly
267     130                 135                 140
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Output Set: N:\CRF4\01052007\J553906D.raw

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Gly Ile Ala His Asn Tyr Lys Asn Glu Thr Glu Trp Arg Ala Asn Ile
                165                 170                 175
Asp Thr Val Met Ala Trp Phe Thr Glu Glu Asp Leu Asp Leu Val Thr
            180                 185                 190
Leu Tyr Phe Gly Glu Pro Asp Ser Thr Gly His Arg Tyr Gly Pro Glu
        195                 200                 205
Ser Pro Glu Arg Arg Glu Met Val Arg Gln Val Asp Arg Thr Val Gly
    210                 215                 220
Tyr Leu Arg Glu Ser Ile Ala Arg Asn His Leu Thr Asp Arg Leu Asn
225                 230                 235                 240
Leu Ile Ile Thr Ser Asp His Gly Met Thr Thr Val Asp Lys Arg Ala
                245                 250                 255
Gly Asp Leu Val Glu Phe His Lys Phe Pro Asn Phe Thr Phe Arg Asp
            260                 265                 270
Ile Glu Phe Glu Leu Leu Asp Tyr Gly Pro Asn Gly Met Leu Leu Pro
        275                 280                 285
Lys Glu Gly Arg Leu Glu Lys Val Tyr Asp Ala Leu Lys Asp Ala His
    290                 295                 300
Pro Lys Leu His Val Tyr Lys Lys Glu Ala Phe Pro Glu Ala Phe His
305                 310                 315                 320
Tyr Ala Asn Asn Pro Arg Val Thr Pro Leu Leu Met Tyr Ser Asp Leu
                325                 330                 335
Gly Tyr Val Ile His Gly Arg Ile Asn Val Gln Phe Asn Asn Gly Glu
            340                 345                 350
His Gly Phe Asp Asn Lys Asp Met Asp Met Lys Thr Ile Phe Arg Ala
        355                 360                 365
Val Gly Pro Ser Phe Arg Ala Gly Leu Glu Val Glu Pro Phe Glu Ser
    370                 375                 380
Val His Val Tyr Glu Leu Met Cys Arg Leu Leu Gly Ile Val Pro Glu
385                 390                 395                 400
Ala Asn Asp Gly His Leu Ala Thr Leu Leu Pro Met Leu His Thr Glu
                405                 410                 415
Ser Ala Leu Pro Pro Asp Gly Arg Pro Thr Leu Leu Pro Lys Gly Arg
            420                 425                 430
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    450                 455
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Input Set : **N:\efs\01_05_07\10553906_efs\ALBI-41348-sequence_ST25.txt**
Output Set: **N:\CRF4\01052007\J553906D.raw**

362 gtccatctgg aaggcccagc atgagaggcc cggccgtcct cctcactgtg gctctggcca 60
364 cgctcctggc tcccggggcc ggagcaccgg tacaaagtca gggctcccag aacaagctgc 120
366 tcctggtgtc cttcgacggc ttccgctgga actacgacca ggacgtggac acccccaacc 180
368 tggacgccat ggcccgagac ggggtgaagg cacgctacat gacccccgcc tttgtcacca 240
370 tgaccagccc ctgccacttc accctggtca ccggcaaata tatcgagaac cacggggtgg 300
372 ttcacaacat gtactacaac accaccagca aggtgaagct gccctaccac gccacgctgg 360
374 gcatccagag gtggtgggac aacggcagcg tgcccatctg gatcacagcc cagaggcagg 420
376 gcctgagggc tggctccttc ttctacccgg gcgggaacgt cacctaccaa ggggtggctg 480
378 tgacgcggag ccggaaagaa ggcatcgcac acaactacaa aaatgagacg gagtggagag 540
380 cgaacatcga cacagtgatg gcgtggttca cagaggagga cctggatctg gtcacactct 600
382 acttcgggga gccggactcc acgggccaca ggtacggccc cgagtccccg gagaggaggg 660
384 agatggtgcg gcaggtggac cggaccgtgg gctacctccg ggagagcatc gcgcgcaacc 720
386 acctcacaga ccgcctcaac ctgatcatca catccgacca cggcatgacg accgtggaca 780
388 aacgggctgg cgacctggtt gaattccaca agttccccaa cttcaccttc cgggacatcg 840
390 agtttgagct cctggactac ggaccaaacg ggatgctgct ccctaaagaa gggaggctgg 900
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394 cgttccccga ggccttccac tacgccaaca accccagggt cacacccctg ctgatgtaca 1020
396 gcgaccttgg ctacgtcatc catgggagaa ttaacgtcca gttcaacaat ggggagcacg 1080
398 gctttgacaa caaggacatg gacatgaaga ccatcttccg cgctgtgggc cctagcttca 1140
400 gggcgggcct ggaggtggag ccctttgaga gcgtccacgt gtacgagctc atgtgccggc 1200
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406 ctctcccgcc cagcagcagg cccctcctcg tgatgggact gctggggacc gtgattcttc 1380
408 tgtctgaggt cgcataacgc cccatggctc aaggaagccg ccgggagctg cccgcaggcc 1440
410 ctgggccggc tgtctcgctg cgatgctctg ctggtcgcgg acggaccctg cctccccagc 1500
412 ttatcccagg ccagaggctg catgccactg tccccggcag cgccaacccc tgcttggctg 1560
414 ttatggtgct ggtaataagc ctcgcagccc aggtccagag cccccggcga gccggtccca 1620
416 taaccggccc cctgccctg cccctgctcc tgctcctccc cttcgggccc cctcctcctg 1680
418 caaaacccgc tcccgaagcg gcgctgccgt ctgcagccac gcgggggcgc gcgggagctc 1740
420 tgcgggcgct ggaacctgca gacccggcct cggtcagctg ggaggggccc gccccggcac 1800
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429 <212> TYPE: PRT
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438 Ala Pro Gly Ala Gly Ala Pro Val Gln Ser Gln Gly Ser Gln Asn Lys
439 20 25 30
442 Leu Leu Leu Val Ser Phe Asp Gly Phe Arg Trp Asn Tyr Asp Gln Asp
443 35 40 45
446 Val Asp Thr Pro Asn Leu Asp Ala Met Ala Arg Asp Gly Val Lys Ala
447 50 55 60
450 Arg Tyr Met Thr Pro Ala Phe Val Thr Met Thr Ser Pro Cys His Phe
451 65 70 75 80
454 Thr Leu Val Thr Gly Lys Tyr Ile Glu Asn His Gly Val Val His Asn
455 85 90 95

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/05/2007
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Output Set: **N:\CRF4\01052007\J553906D.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 905

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:10,11,12,13,14,15,17,18

VERIFICATION SUMMARY DATE: 01/05/2007
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Output Set: **N:\CRF4\01052007\J553906D.raw**

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:392 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:900